



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,848	12/17/2003	Carl Joseph Kraenzel	042846-0312967	5441
53796 7590 11/26/2008 PILLSBURY WINTHROP SHAW PITTMAN, LLP c/o SUSAN TRADER 1650 TYSONS BOULEVARD P.O. BOX 10500 MCLEAN, VA 22102				
EXAMINER MADAMBA, GLENFORD J				
ART UNIT 2451		PAPER NUMBER		
MAIL DATE 11/26/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/736,848

Applicant(s)

KRAENZEL, CARL JOSEPH

Examiner

Glenford Madamba

Art Unit

2451

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29, 30, 32, 33, 35, 36, 38, 41-56 and 58-88 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29, 30, 32, 33, 35, 36, 38, 41-56 and 58-88 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-849)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the latest submission by Applicant's representative on September 3, 2008.

Response to Remarks

1. With respect to Applicant's latest submission, the Office has given consideration to the remarks filed on September 3, 2008, but has deemed the arguments unpersuasive and/or insufficient to overcome the rejection of the claims in view of the applied prior art reference(s) of the previous Office Action, as will be discussed below.

In particular, with respect to independent claims 29 and 65, Applicant again argues that neither Bode, Fratkina, nor McDonald, alone or in combination, teaches or suggests particular features of the claim, which recites in part:

"automatically monitoring, via the first interface, a communication between a user associated with the remote client and at least one other individual;

automatically filtering one or more topic words appearing in the monitored communication that define a context or one or more key topics of the communication;
and

automatically searching the at least one data source using one or more topic words to generate search results for information relevant to the context or the one or more key topics of the communication; and

automatically providing search results to said user.”

In support of his argument, Applicant remarks that “the claimed invention requires automatically monitoring a communication between human individuals (i.e., the user and at least one other individual), and automatically providing search results based on topic words or key topics of the monitored communication”. As such, Applicant notes that “the claimed invention involves two human individuals communicating and an automated monitoring system”. The Office respectfully disagrees and submits that Applicant has misinterpreted and/or not fully considered all of the teachings and disclosures of the prior art references.

Specifically, with regards to the Bode prior art reference, Applicant argues that even though Bode expressly teaches that “a user of Bode’s Customer Relationship Management System / Applicaton (CRM) may interact with an automated CRM system (i.e., machine) or customer service personnel (i.e., a human), and that the user interacts with either the machine or the human, Bode still does not disclose “monitoring a communication between two humans”, and Bode thus cannot not teach the above said features of “automatically monitoring the communication between the user and the human customer service personnel...and automatically providing search results based

on topic words or key topics of the monitored communication. The Office respectfully disagrees.

In response to the argument, the Office firstly remarks that at least both Bode and Fratkina (which Bode "incorporates by reference" in its entirety) expressly teach and disclose, as part of the CRM system / application of their invention, "*dialog interaction between a user and content provider 100*" (Bode: col 7, L4-30), as well as "*a dialog engine 435 for carrying on a dialog with the user 420*" (Fratkina: Abstract) (Bode: col 8, L11-28). In this regard, Bode additionally and expressly teaches that

"In FIG. 4, system 400 may additionally include a user search editor 430, which allows the user 420 to select/deselect particular searches S1, S2, S3,..., SN and/or to edit the criteria used for particular searches. System 400 may also additionally include a dialog engine 435 for carrying on a dialog with the user 420, as discussed above. Using taxonomies or any other organizational structure 440 of knowledge corpus 425, or using contextual or other information otherwise obtained (e.g., from the user 420) during the dialog session, dialog engine 435 imposes one or more additional constraints on one or more of the searches S1, S2, S3, . . . , SN. For example, a particular user's access privileges may limit one or more of the searches to particular portion(s) of the knowledge corpus 425. In another example, a user's response to a user interface prompt may limit one or more of the searches to particular portion(s) of

the documents (e.g., "Activities," "Objects," "Products," and/or "Symptoms" portions of the documents). "

[Bode: col 8, L11-28]

With the above teaching, it is clear that Bode at the very least expressly discloses that a user, having a 'dialog interaction' with the CRM system (e.g., via a telephone call or email inquiry), allows the CRM system to perform a 'search' / query and retrieve information from a knowledge container or database (e.g. knowledge corpus 425) based on "contextual or other information "obtained from a user (e.g. user 420) during the dialog session....." And as noted and acknowledged by Applicant himself (based on his own *Remarks*), Bode also expressly teaches that "a user of Bode's Customer Relationship Management System / Application (CRM) may interact with an automated CRM system (i.e., machine) or customer service personnel (i.e., a human), and that the user interacts with either the machine or the human. Based on the above combined disclosures , it is clear that Bode expressly teaches or discloses the argued features of "automatically monitoring, via the first interface, a communication between a user associated with the remote client and at least one other individual.....automatically searching the at least one data source using one or more topic words to generate search results for information relevant to the context or the one or more key topics of the communication; and automatically providing search results to said user", as required by the current claim language and/or recitation.

Additionally, with respect to Bode, Applicant argues that even though Bode expressly teaches that “a user may be forced to place a telephone call to an application engineer or other customer service personnel”, Bode makes no mention or suggestion of automatically monitoring the communication between the user and the human customer service personnel (once the user begins conversing with the human customer service personnel), and automatically providing search results based on topic words or key topics of the monitored communication. In response to this argument, the Office firstly remarks and notes with emphasis that the particular feature (i.e., “automatically monitoring the communication(once the user begins conversing with the human customer service personnel)), upon which Applicant’s argument is based, is nowhere to be found in the claim recitation. At best, the claim language requires “automatically monitoring a communication between human individuals (i.e., the user and at least one other individual), and automatically providing search results based on topic words or key topics of the monitored communication”, as explained and pointed out by Applicant himself (Applicant *Remarks*: page 14, paragraph 3). There is nothing in the claim recitation to specify ‘when’ monitoring of a dialog communication is to begin -- only that a dialog communication between a user and another human individual is ‘automatically monitored’ by the system.

Additionally, the Office also remarks that the argued feature of “automatically monitoring the communication between two humans” is at least disclosed by Bode, as

previously established above. Bode expressly teaches a CRM system (automated or 'manned' by a customer service representative) that obtains contextual information from a user "during a dialog session" and performs a search / retrieval of information on a knowledge container based on the information obtained from a 'dialog interaction' between the user and the CRM system.

Moreover, the Office also notes that Bode makes it expressly clear that "in a CRM application, the user may be forced to place a telephone call (or email inquiry) to an applications engineer or other customer service personnel....however, this is a more costly way to meet customer needs". (emphasis added) [col 1, L61-65]. Bode thus discloses 'embodiments' for both a *dialog interaction* with a user via an automated CRM system (e.g. IVR) and/or – alternatively - with a 'human' customer service representative, with the "cost difference" a consideration for implementing the particular embodiment by providers of the invention (i.e., resulting in 'interaction' that is *automated-only*, 'personal' via interaction with a *customer service representative*, or a 'hybrid' interaction, with both automated and/or human customer service representative is employed) . The argued feature of monitoring a communication or interaction "between a user of a remote client and at least one other individual" is again thus expressly disclosed by at least Bode, since Bode discloses at least one specific embodiment wherein the argued feature takes place (i.e., when the dialog interaction is 'escalated' to a human representative). The Office also notes that the 'escalation' embodiment is also taught and disclosed by Fratkina.

Finally, with regards to the claims, Applicant also argues that even while Fratkina expressly discloses "a communication between individuals (i.e., the user and a human service representative), the human service representative, it appears that the human service representative is 'merely assisting' the user in the interaction with the dialog engine, and that the human service representative appears to be able to 'converse' with the user and only 'manually' interact with the dialog engine. Applicant additionally that Fratkina 'teaches away' from the claimed invention because he 'teaches a machine for eliciting information from a user to give a human feel to the dialog [between a user and a machine]." The Office respectfully disagrees and submits that Applicant has misinterpreted and/or not considered the full teachings and disclosures of the prior art references.

In response to the argument that in Fratkina the human service representative appears to be "merely assisting the user", the Office again remarks that the argued feature of a "human service representative merely assisting a user" is nowhere to be found in the claim language. The claims, at most, only require that the invention "automatically monitors a communication between human individuals, and automatically provides search results based on topic words or key topics of the monitored communication", with search results provided in relation to communications between individuals. (Applicant's Specification: par.10). There is nothing in the claim language that excludes the specific case of 'escalating a communication to a human customer

representative' from reading on the current claim recitation. Indeed, Bode makes it clear that a human customer service representative may 'assist' a user with an inquiry via email or telephone from the beginning using a CRM system – but at a greater cost to the service provider. As an alternative, the option of providing a 'hybrid' dialogue interaction (e.g. automated CRM combined with Human Representative service via 'escalation') that is 'triggered' by an action or 'dialog state' is expressly taught by both Bode and/or Fratkina [Fratkina: 0226-0227].

Finally, with regards to Applicant's argument that none of the prior art references teach or disclose the argued features of "automatically monitoring, via the first interface, a communication between a user associated with the remote client and at least one other individual.....automatically searching the at least one data source using one or more topic words to generate search results for information relevant to the context or the one or more key topics of the communication; and automatically providing search results to said user", as recited by the claims; the Office also asserts that not only are the argued features taught by Bode and/or Fratkina, as previously established above, the argued features are also "well-known" to one of ordinary skill in the art.

In this regard, Applicant is invited to review U.S. Patent 6,718,366 (Beck et al), which is included in this action, and "cited but not referred to". Beck expressly discloses a method and apparatus for providing media-independent self-help modules within a

multimedia communication-center customer interface (MMCC) [Fig. 1]. As part of his invention, Beck teaches and discloses Interaction *Monitor 331* and *Dialog Sorter 339* [Fig. 16] for “monitoring communications between a customer and human agent, for example. Beck further teaches that in certain systems (e.g. CINOS), a user ‘call’ or inquiry may be provided to a ‘live agent’ (human) or to an automated system for the purpose of effecting further routine business with the enterprise [Beck: col 5, L28-38]. Beck also teaches that as part of the disclosed embodiments of his invention, “there may also be a step for ‘monitoring’ client activity with the wizard and making that activity available to an enterprise agent through the OS” [col 6, L45-48] [also, see col 10, L35-40] [col 14, L6-18 & 45-55]. The argued feature is also thus “well-known” in the art.

With respect to dependent claims 32, 33, 50, 51, 66, 64, 75, 76, 86 and 88, the claims are depending from their respective independent parent claims, inheriting all of their features, and the Office accordingly maintains the rejection of the claims for at least the same reasons provided above for claims 29 and 65.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 29, 30, 35, 36, 38, 41-49, 52-56, 58-61, 63, 65-74, 77-85 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode et al (hereinafter Bode), U.S. Patent US 7,206,778 in view of Fratkina et al (hereinafter Fratkina), U.S. Patent Publication US 2001/0049688 A1 and in further view of McDonald, *Non-Patent Literature Evaluating Expertise Recommendations*.

As per claims 29 and 65, Bode in view of Fratkina and in further view of McDonald discloses in a system comprising a network, a server connected to a network and hosting an information module (content provider server 100) [Fig. 1], a first interface to a communications link (130) for connecting the server to a remote client (user 105), and a second interface for connecting the server to at least one data source (knowledge containers 201 / 202) [Fig. 2]; a method for monitoring a communication between human individuals and retrieving information relevant to the communication between individuals and retrieving information relevant to the communication [Abstract], the method comprising:

automatically monitoring, via the first interface, a communication between a user associated with the remote client (communication / dialog engine 435) [Fig. 4] and at least one other individual;

automatically filtering one or more topic words appearing in the monitored communication that define a context or one or more key topics of the communication (filter / lexical taxonomies) [col 5, L6-15]; and

automatically searching the at least one data source using the one or more topic words to generate search results for information relevant to the context or the one or more key topics of the communication (Search Engine 410) [Figs 4 & 5]

automatically providing the search results to said user (e.g., search results returned) [Abstract].

With regards to the claim, while Bode discloses substantial features of the invention, the additionally amended feature of "a communication *between a user* associated with the remote client *and at least one other individual*" is disclosed by Fratkina, which is incorporated by reference, in a related endeavor.

Fratkina discloses as his invention a method and system for retrieving information through the use of a multi-stage interaction with a client to identify particular knowledge content associated with a knowledge map. Specifically, Fratkina discloses the above said amended feature of a communication *between a user* associated with the remote client *and at least one other individual* [Figs. 19-21] (e.g., Escalation causing a "live chat" type of interaction with a human to appear within the user's web browser....) [0225].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Bode's invention with the above said feature, as disclosed by Fratkina, for the motivation of providing a multi-step conversation-like interaction

between a person and a computer or other device to refine and satisfy the person's request for information [0005].

Further, while the combination of Bode and Fratkina expressly discloses substantial features of the invention, as above, the additionally recited features of 'automatically monitoring', 'automatically searching', and 'automatically providing' the search results to said user, is expressly disclosed by McDonald in a related endeavor.

McDonald discloses as his invention an Expertise Recommender System (ER) for finding and recommending people who are likely to have expertise in a specific problem [Abstract, pg 214] [Paragraphs 2-4, pg. 214]. Specifically, McDonald discloses the above said amended features of 'automatically monitoring', 'automatically searching', and 'automatically providing' the search results to said user (e.g., "automatically assigning incoming calls to an appropriate tech rep", "establishing communications between a support rep and the customer", and "tracking active calls", etc.) [Section 3.1.2 *Tech Support Heuristic*, pg. 217]

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Bode and Fratkina with the above said feature, as disclosed by McDonald, for the motivation of providing a system that resolves the problem of identifying and recommending individuals who have expertise [Abstract] [Introduction] [pg. 214].

As per claim 30, Bode discloses the system of claim 29, further comprising outputting the search results to the remote client (Result Ranking Engine 415) [Figs. 4 & 5].

As per claim 35, Bode discloses the system of claim 29, wherein the remote client comprises at least one of a personal computer, personal digital assistant, or a wireless terminal device (PC or PDA) [col 25, L35-42].

As per claim 36, Bode discloses the system of claim 1, wherein the at least one data source comprises at least one database (content base 115) [col 24, L10-13] or knowledge management (KM) repository (Knowledge Corpus 425) [Fig, 4].

As per claim 38, Bode discloses the system of claim 1, wherein the information module comprises an Internet web site (e.g. website) [{0178} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64] or software application (i.e., software) [col 24, L10-13] (e.g., CRM application) [col 1, L61] .

As per claims 41 and 66, Bode discloses the system of claim 29, wherein the monitoring step further comprises receiving the communication as input in real time (i.e., real-time timer) [col 10, L45-55].

As per claims 42 and 67, Bode discloses the system of claim 29, wherein the communication comprises at least one text message (text communication 201) [Fig. 3].

As per claims 43 and 68, Bode discloses the system of claim 42, wherein the at least one text message comprises an electronic mail message (email communication 201) [Fig. 3].

As per claims 44 and 69, Bode discloses the system of claim 42, wherein the at least one text message comprises a plurality of text messages comprising a web chat ("dialogs" on the web) [Figs. 11-13, 15-17, 19 and 21] & {0178} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

As per claims 45 and 70, Bode discloses the system of claim 29, wherein the communication comprises a voice communication (e.g. telephone call) [col 1, L36].

As per claim 46 and 71, Bode discloses the system of claim 45, wherein the voice communication comprises at least one of a telephone conference, or live conversation (e.g. Internet based-telephone videoconferencing) [col 5, L29-35].

As per claims 47 and 72, Bode discloses the system of claim 45, wherein the monitoring module receives the voice communication as input in real time and converts it to text [{Abstract} {0015} (IVR / text to speech system) {0184} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

As per claims 48 and 73, Bode discloses the system of claim 29, wherein the topic filter module filters one or more topic words appearing in the communication using a weighted averaging algorithm (e.g., term-extraction algorithm with weighted tags 202) [Fig. 12] [col 2, L47-49].

As per claims 49 and 74, Bode discloses the system of claim 48, wherein the topic filter module ("topic spotter") [col 6, L39] applies the weighted averaging algorithm to the communication at a predetermined frequency (e.g., term-extraction algorithm with weighted tags 202) [Fig. 12] [col 2, L47-49].

As per claims 52 and 77, Bode discloses the system of claim 29, wherein providing search results to said user comprises hypertext links to the search results, so that the user associated with the remote client may select the hypertext links to access the search results (email response including hyperlinks) [col 6, L60].

As per claims 53 and 78, Bode discloses the system of claim 29, wherein the information module further comprises a customization module for enabling a user associated with the remote client to specify one or more parameters (search strategy 910 / preferences) [col 19, L35-65] [Fig. 9].

As per claims 54 and 79, Bode discloses the system of claim 53, wherein the user may specify the types of communication to be monitored (e.g., email, Internet based-

telephone videoconferencing, text message) [col 5, L29-35].

As per claims 55 and 80, Bode discloses the system of claim 53, wherein the user may specify the at least one data source to be searched [{0179} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

As per claims 56 and 81, Bode discloses the system of claim 53, further comprising enabling the user to specify the format of the search results [Figs. 11-13, 15-17, 19 and 21] & {0178} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

As per claims 58 and 82, Bode in view of Fratkina discloses the method of claim 29, wherein information relevant to the context or one or more key topics of the communication comprises one or more knowledge reports by experts, documents, or other resources associated with a context or one or more key topics of the communication [col 15, L6-35] [col 5, L7 – col 6, L5] (e.g., Topic Spotter) [col 6, L25-58].

As per claims 59 and 83, Bode in view of Fratkina discloses the method of claim 29, wherein providing search results to said user comprises providing full text or a brief synopsis of each search result (e.g., Search Results R1-R3) [Fig. 4] [col 7, L48 – col 8, L28].

As per claims 60 and 84, Bode in view of Fratkina discloses the method of claim 29, further comprising providing the user with the one or more topic words that were searched [Table 3] [col 11, L50-67].

As per claims 61 and 85, Bode in view of Fratkina discloses the method of claim 29, wherein providing search results comprises one or more of: sending the search results in an electronic mail message; presenting the search results on a designated intranet or Internet site; displaying the search results in a pop-up window on a display device; or presenting the search results to at least one other individual (e.g., CRM sends a reply email to user 105) [col 6, L35-67].

As per claims 63 and 87, Bode in view of Fratkina discloses the method of claim 29, wherein the filtering comprises filtering by activity context, user context, taxonomy-parent or synonym word look-up, involved-participant context, or topical urgency context (e.g., filter taxonomies) [col 5, L10] [Tables 1-3].

3. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Fratkina and in further view of McDonald and Teng et al (hereinafter Teng), U.S. Patent 6,976,018.

As per claim 32, Bode in view of Fratkina and in further view of McDonald and Teng discloses the system of claim 29, wherein the network comprises at least one the Internet [col 1, L15], an intranet or a virtual private network.

While the combination of Bode and Fratkina and McDonald discloses substantial features of the invention such as a system for monitoring a communication and retrieving information relevant to the communication [Abstract], the additional feature of the system wherein the network comprises at least one of an intranet or a virtual private network is disclosed by Teng in a related endeavor.

Teng discloses as his invention a method that queries a plurality of search engines for properties to identify for which content categories the search engines are suited. A query to locate content is communicated to those of the plurality of search engines suited to service the query to locate content, based on at least one content category of the query to locate content [Abstract] [Figs. 1-3]. In particular, Teng discloses the added feature of the system wherein the network comprises at least one of an intranet or a virtual private network [col 1, L15-34].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Bode and Fratkina and McDonald with the above additional feature of the system wherein the network comprises at least one of an intranet or a virtual private network, as disclosed by Teng, for the motivation of providing search options that enables the selection of the best available search technology for a particular search query, as well as providing for flexibility [col 1, L35-42].

4. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Fratkina and in further view of McDonald and Burdick et al (hereinafter Burdick), U.S. Patent 7,185,001.

As per claim 33, Bode in view of Fratkina and in further view of McDonald and Burdick discloses the system of claim 29, wherein the communications link comprises at least one of a digital subscriber line (DSL) connection, a digital data services (DDS) connection, an Ethernet connection, an integrated services digital network (ISDN) line, or an analog modem connection.

While the combination of Bode and Fratkina and McDonald discloses substantial features of the invention such as a system for monitoring a communication and retrieving information relevant to the communication [Abstract], the added feature of the system wherein the communications link comprises at least one of a digital subscriber line (DSL) connection, a digital data services (DDS) connection, an Ethernet connection, an integrated services digital network (ISDN) line, or an analog modem connection is disclosed by Burdick in a related endeavor.

Burdick discloses as his invention an interactive document search, retrieval, categorization, and summarization method and system [Abstract] [Fig. 1]. The invention retrieves relevant documents from a computer network in response to a

user's query and organizing the retrieved document into categories [col 1, L10-17]. In particular, Burdick discloses the added feature of the system wherein the communications link comprises at least one of a digital subscriber line (DSL) connection, a digital data services (DDS) connection, an Ethernet connection, an integrated services digital network (ISDN) line, or an analog modem connection [col 6, L30-44] [Fig. 1].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Bode and Fratkina and McDonald with the above additional feature of the system wherein the communications link comprises at least one of a digital subscriber line (DSL) connection, a digital data services (DDS) connection, an Ethernet connection, an integrated services digital network (ISDN) line, or an analog modem connection, as disclosed by Burdick, for the motivation of providing a system and method for interactively searching, retrieving, categorizing, and summarizing documents, and for minimizing the opening, closing, and reading of documents [col 2, L24-29].

5. Claims 50, 51, 75 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Official Notice.

As per claims 50 and 51, Bode in view of Official Notice discloses the system of claim 48, further comprising a user associated with the remote client specifies the frequency.

With regards to the claims, Official Notice is taken in that it the specification of a frequency by a user associated with a remote client and/or designation of a default frequency by an information module of the system is would be obvious to one of ordinary skill in the art for applying an algorithm (e.g., term-extraction algorithm with weighted tags 202) [Fig. 12] [col 2, L47-49] to the module of the system at a particular rate and as part of the design in the monitoring of communication for searching and retrieving documents and other content using search engines and a knowledge database (knowledge containers 201 / 202) [Fig. 2].

As support for the assertion of obviousness in view of what is known in the art, the Office additionally remarks that, upon a closer examination of the full teachings by Bode, the feature of the system wherein a user specifies a frequency or wherein a default frequency is designated is actually expressly disclosed by the Bode prior art reference (e.g. Algorithmic implementation for searching a specified/selected n-dimensional search matrix) [col 15, L46 – col 16, L37] [Fig. 8] or, alternatively, the Burdick prior art reference (e.g., iterative reclustering / recategorization or Search refinement) [col 9, L33 – col 10, L50] [Fig. 1].

6. Claims 62, 64, 86 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Fratkina and in further view of McDonald and Liddy et al (hereinafter Liddy), U.S. Patent 5,873,056.

As per claims 62, 64, 86 and 88, Bode in view of Fratkina and in further view of McDonald and Liddy discloses the method of claim 29, wherein the filtering comprises:

generating a topic vector comprising a list of several potential matches for a word; and

refining the topic vector by comparing the topic vector with other topic vectors for a predetermined time interval or number of characters to determine if they share a similar context or one or more key topics.

While the combination of Bode and Fratkina and McDonald discloses substantial features of the invention such as the system of claim 29 for monitoring a communication and retrieving information relevant to the communication [Abstract], the added feature of the system wherein the communications link comprises at least one of generating a topic vector comprising a list of several potential matches for a word, and refining the topic vector by comparing the topic vector with other topic vectors for a predetermined time interval or number of characters to determine if they share a similar context or one or more key topics is disclosed by Liddy in a related endeavor.

Liddy discloses as his invention a natural language processing system that uses unformatted naturally occurring text and generates a subject vector representation of the text, which may be the entire document or a part thereof such as its title, a paragraph, a clause, or a sentence therein [Abstract]. In particular, Liddy discloses the added feature of generating a topic vector comprising a list of several potential matches for a word (e.g., subject code vector), and refining the topic vector by comparing the topic vector with other topic vectors for a predetermined time interval or number of characters to determine if they share a similar context or one or more key topics [Abstract] [Figure 1] col 6, L30-44] [Figs. 1-4 & 10-11].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Bode and Fratkina and McDonald with the above additional feature of the system, as disclosed by Liddy, for the motivation of providing a system for natural language processing which accounts for lexical ambiguity and for automatic classification and retrieval of documents by their general subject content with statistically guided word sense disambiguation [col 1, L5-10].

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Wallace Martin can be reached on 571-272-3440. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451

Glenford Madamba
Examiner
Art Unit 2151